IRON BRIGADE ARMORY

DARPA

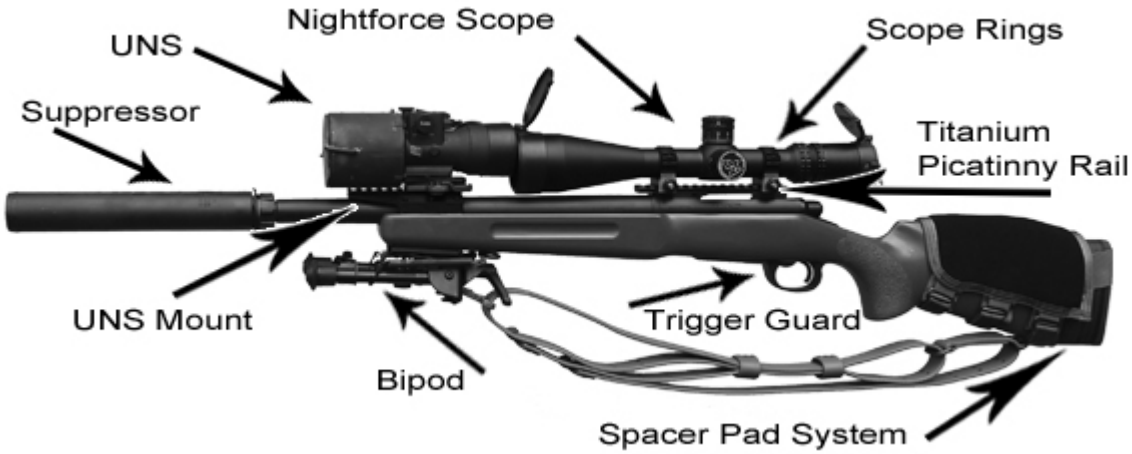
XM-3
SNIPER WEAPON SYSTEM
MANUAL

Iron Brigade Armory under contract to the Defense Advanced Research Projects Agency (DARPA) developed and built the XM-3 to incorporate the best available technology into a sniper weapon system to address current operational concerns on size, weight, target detection, sound suppression, accuracy, range, day/night operations and the use of titanium. The XM-3 has established the baseline from which DARPA will identify investment areas where new technologies are needed to provide snipers and riflemen the greatest possible advantage on tomorrow's battlefield.

XM-3 Rifle Component List

Weapon Component	Manufacturer
Receiver- M700, Clip-Slotted by IBA, Stainless Steel	Remington Arms
Stock- McMillan A-6, 12.25”- 13.75” Adjustable LOP	McMillan Stocks
Barrel- 18.5” OAL, 416R Stainless Steel, Twist Rate 1:10”	Hart Rifle Barrels
UNS Mount- BCM22H 6061 Aluminum, Anodized	IBA Ltd.
Trigger Guard- M4 Carbon Steel	Badger Ordnance
Sling Swivels- One Piece, Permanently Installed	Wichita Arms
Recoil Lug- Titanium @ 1.070” .313”	Badger Ordnance
Scope mount- Titanium Picatinny Rail, 20 MOA, Lugged	IBA Ltd.
Scope Rings- .885 Ultra-lite, Aluminum / Titanium	Nightforce Inc.
Fire Control- M700 Trigger Re-Built by IBA	Remington Arms
Magazine- Internal W/ Modified Milled Follower	Remington Arms

XM-3 SWS



IBA XM-3 Sniper Weapon System (SWS)
Bolt Action .308 Win / 7.62MM

CALIBER:	.308 Winchester / 7.62MM Chambered for Lake City 175 Gr.
BARREL:	18.5” HART 416R Stainless Steel
RIFLING*:*	1:10 RH Twist w/ 6 Grooves
MAGAZINE**:**	Internal / Welded 5 Rd. Capacity
MUZZLE VELOCITY**:**	2550 FPS w/ Suppressor
MAXIMUM EFFECTIVE RANGE:	1000 yards
LENGTH*:*	40.50” without suppressor 46.25” with suppressor
DAY OPTIC SIGHT*:*	3.5-15x50 Nightforce NXS 2lbs. 3oz (with rings)
NIGHT VISION SIGHT:	AN/PVS-22 Universal Night Sight
COMBAT WEIGHT: Complete with sling, bipod, ammunition	Day operations: 16 lbs Night operations: 18 lbs

Complete System List

XM-3 Sniper Rifle w/ Titanium Picatinny Rail and UNS Barrel Channel Mount
Nightforce NXS Mil-Spec 3.5-15x50 Day Optic Sight w/ Zero Stop Feature
Nightforce .885 Ultra Light Scope Rings
ANPVS-22 Universal Night Sight (UNS) with Soft Case
Surefire FA762SS Suppressor
Harris BRM-S Bipod w/ Pod-Loc
Turner Saddlery AWS Sling (OD) w/ (1) QD Swivel
Dewey Cleaning Rod
Dewey Bore Guide
Allen 5/32 T-Wrench
SK T30 T-Wrench
Seekonk Torque Wrench
Kobalt 1/2" Adapter
Craftsman T30 Adapter
Kleinendorst Bolt Disassembly Tool

WARNING: Before starting any inspection and/or performing any maintenance procedures, inspect the chamber physically and visually to ensure the weapon is unloaded.

Service Upon Receipt

1. Inspect SWS Hard Case for any shipping damage.
2. Inspect contents against system list.
3. Ensure that the rifle is clean.
4. Inspect bore to ensure there are no obstructions.
5. Check torque values of Day Optic Sight and Trigger Guard Bolts.
6. Confirm zero (Live Fire) of Rifle with Day Optic Sight and Suppressor.
7. Clean rifle per instructions.
8. Rifle is ready for service.

Safety and Inspection

The XM-3 is built by Iron Brigade Armory who employs the highest quality of armorers/gunsmiths including retired U.S. Marines holding the 2111/2112 MOS. All tooling and gauges used are the best available in the industry. The specs are held to the tightest possible standards while maintaining combat reliability.

Iron Brigade Armory, Ltd. considers all procedures included in the USMC M40A3 Technical Manual (TM05539D-10/1) to be acceptable for use on the XM-3 SWS. All M40A3 gauges used by USMC 2111/2112 armorers are acceptable for use on the XM-3 SWS. The procedures and/or specifications preferred by Iron Brigade Armory are listed below for reference purposes.

Headspace:	1.630	Minimum "Go"
	1.636	Maximum "No Go"
Bore Erosion:	"0"	Minimum
(Reference purposes only)	"4"	Maximum
Trigger Pull:	3.25 lbs	Minimum
	4.00 lbs	Maximum
Firing Pin Protrusion	.045	Minimum
(Remington Factory Spec)	.075	Maximum
Scope Ring Torque	68 inch lbs	+/- 3% consistent
Trigger Guard Bolt Torque	68 inch lbs	+/-3% consistent
Trigger Guard Bolt Size	T-30 Torx	
Scope Ring Screw Size	T-15 Torx	
Scope Mount Base Screw Size	T-15 Torx	
UNS Mount Screw Size	T-15 Torx	

LTI/PFI Procedures:

1. Ensure the weapon is unloaded (Visually and physically inspect the chamber).
2. Inspect overall weapon system for cracks, dents, excessive wear or any obvious defects.
3. Before disassembling check torque setting on scope ring cross bolt and trigger guard bolts with the provided torque wrench (The bolts/nuts should not accept torque assuming they were installed correctly from previous inspections).
4. Check/Confirm Headspace and notate results in provided data/gun book.
5. Check/Confirm Bore Erosion if applicable gauge is available (Not required for safety purposes, reference purposes only).
6. Check/Confirm Trigger Pull (The Trigger Pull should consistently break within .25 lbs of set weight for a period of 5 consecutive pulls/breaks).

7. Inspect bolt assembly for damage and/or excessive wear (Bolt face, bolt lugs, extractor, ejector, ejector spring, ejector cross pin, firing pin, firing pin spring).
8. Upon reassembly confirm scope ring and trigger guard bolt torque is consistent with original spec utilizing provided torque wrench.
9. Check to ensure suppressor adapter is fully intact and tight.
10. Ensure the floorplate opens properly once re-assembled.
11. Perform all trigger/fire control checks to ensure the weapons will not slam fire.
12. Ensure safety assembly properly engages and does not allow the weapon to fire upon disengagement.

Important Things to Remember

1. Always make sure the suppressor is attached properly and securely. This is vital. Not doing so can/will cause severe damage and injury to you and others around you.
2. Never fire when the bore is wet from solvents or oils.
3. The assigned bolt body must stay with the designated serialized rifle at all times, they are NOT interchangeable.
4. The assigned suppressor should always stay with the designated serialized rifle, unless damaged in combat. At that point another suppressor can be installed but confirming bore clearance and zero is recommended.

Fire Control Safety

Located on the right rear side of the receiver.

To engage the safety, place the switch in the “S” position.

When engaged in the “S” position provides protection against accidental or unintentional discharge.

Always engage the safety before handling, loading or unloading the rifle.

WARNING: If the weapon fires unintentionally when the safety is disengaged (In “F” position) immediately clear the weapon and return to Armory for repair.

Bolt Assembly

The bolt assembly feeds and chambers the round.

To Remove Bolt Assembly:

1. Point the rifle in a safe direction.
2. Engage the safety.
3. Raise the bolt handle.
4. Press the bolt stop release.
5. As you press the bolt stop release, slide the bolt assembly to the rear.

To Install the Bolt Assembly:

1. Point the rifle in a safe direction.
2. Put the safety in the “S” position.
3. Align the lugs on the bolt assembly with the receiver raceway.
4. Completely slide the bolt assembly into the receiver.
5. Close the bolt handle.

Fire Control / Trigger:

1. The trigger pull weight is set for consistency at 3.75 lb +/- .25 lb.
2. The trigger is set for combat reliability and should not be adjusted unless broken or worn.

WARNING: Never remove the trigger mechanism or make adjustments to the trigger assembly unless done so by a certified armorer.

Barrel

To Check Inside The Barrel:

1. Put the safety in the “S” position.
2. Remove the bolt body from receiver.
3. Remove any ammunition from the chamber and/or magazine.
4. Look through the inside of the barrel from the chamber end.

To Remove Dirt Or Foreign Object From Inside The Barrel:

1. Install the bore guide.
2. Push the cleaning rod w/ dry patch through the barrel, remove patch.
3. Install a clean patch and pull the new, dry patch back through the barrel.

Stock Adjustment

1. Loosen the two screws in the recoil pad using the 5/32 T-handle Allen wrench.

2. Add or remove the desired amount of spacers needed.

3. Tighten the two screws in the recoil pad using the 5/32 T-handle Allen wrench.

Day Optic Sight

How To Attach Day Optic Sight:

1. Before mounting the Day Optic Sight w/ Rings, clean/lubricate the threads of each scope ring mounting bolt.
2. Ensure smooth movement of each mounting nut and mounting claw.

NOTE:
There are several mounting slots on the Picatinny Rail scope mount. Select the set of slots which provide the proper eye relief. Once a set of slots is chosen, the same set should always be used in order to retain zero.

Ensure mounting surface of base is free of dirt, oil and grease.

1. Set each ring bolt spline in the selected slot.
2. Slide the rear mount claw against the base while pushing the claw and scope forward. Finger tighten the mounting ring nut.
3. Slide the front mount claw against the base while pushing the claw forward. Finger tighten the mounting ring nut.
4. Utilizing the ½" socket and the Seekonk torque wrench, torque the rear mounting ring nut.
5. Utilizing the ½" socket and the Seekonk torque wrench, torque the front mounting ring nut.
6. After checking your zero re-torque the rear and front mounting ring nuts.

How To Remove Day Optic Sight:

1. Utilizing the ½" socket and the Seekonk torque wrench loosen the front and rear mounting ring nuts but do not remove the nut from the cross bolt.
2. Rotate the day optic sight w/ rings towards the left.
3. Remove day optic sight.

Loading and Unloading

To Load The Rifle:

1. Point the rifle in a safe direction.
2. Lift the bolt handle and pull the bolt handle all the way back, do not remove the bolt completely.
3. Engage the safety.
4. Load five (5) rounds, one at a time, into the magazine with slight rearward pressure, this will allow smoother feeding.
5. Hand feed one round into the chamber.
6. Use your finger to push the rounds in the magazine as far down as possible.
7. Slowly slide the bolt forward so that the bolt slides over the top of the rounds in the magazine.
8. Close the bolt ensuring the safety is engaged.

To Unload The Rifle:

1. Point the rifle in a safe direction.
2. Engage the safety.
3. Lift the bolt handle with one hand.
4. Hold the other hand over the ejection port.
5. Slide the bolt towards the rear.
6. Remove the extracted round from the bolt face.
7. Hold your hand under the floorplate.

WARNING: Make sure there are no cartridges in the chamber or magazine.

8. Push the magazine floorplate release.

9. The floorplate will open from the downward pressure of the loaded magazine.
10. The magazine spring and follower will drop with the floorplate allowing the loaded rounds to be released.
11. Remove the rounds.
12. Re-install the follower and spring inside the magazine box.
13. Close the floorplate ensuring the magazine floorplate release snaps out locking the floorplate.

Operating Under Extreme Conditions

1. Clean the rifle inside at room temperature, if possible.
2. Apply a light coat of oil/lubricant to the bolt body only.
3. Do not allow oil/lubricant to contact the face of the bolt.
4. Keep the rifle and ammunition dry if possible.
5. Remove the bolt and visibly inspect the bore before firing.
6. The bore should be free of foreign objects and any liquid.

Disassembly (Field Stripping)

1. Point the rifle in a safe direction.
2. Engage the Safety.
3. Unload the rifle, visually and physically inspect the chamber.
4. Remove the bolt assembly.

5. Remove the UNS mount by removing the (6) T-15 screws.
6. Open the floorplate.
7. Remove front and rear T-30 trigger guard bolts.
8. Remove trigger guard from the stock.
9. Lift stock assembly straight up from barreled action (Only wiggle the stock to break the suction). Wiggling the stock too much may chip the edges of the bedding.
10. Assemble in reverse order using the Seekonk torque wrench on the trigger guard bolts.

Storage and Transportation

1. When preparing the rifle for storage in the hard case, ensure that the weapon is UNLOADED. Visually and physically inspect the chamber!
2. Leave the bolt body in the rifle at all times during storage.
3. Release firing pin tension by "Dry Firing" the rifle. (MAKE SURE THE RIFLE IS UNLOADED AND POINTED IN A SAFE DIRECTION BEFORE PERFORMING THE DRY FIRE!)
4. The safety will not be engaged, as the firing pin will not be cocked.
5. Always clean and lubricate the entire SWS before storage in the hard case.

Cleaning the Rifle

1. Ensure the weapon is unloaded, visually and physically inspect the chamber.
2. Remove the Suppressor and place to the side.
3. Remove Bolt Body and place to the side.
4. Insert Bore Guide into receiver.
5. Insert patch to the patch holder, on the cleaning rod.
6. Apply Bore Solvent to the patch.
7. Push the patch through the bore, all the way, pull back through.
8. Repeat steps 4-6 until 75% of the cleaning patch appears clean.
9. Leave bore wet with solvent while cleaning bolt body.
10. Remove Firing Pin assembly from bolt body using Kleinendorst bolt tool.
11. Wipe off any excess grease or oil from firing pin assembly and threads.
12. Blow off firing pin assembly with air, if available.
13. If air is not available use cleaning brush.
14. Wipe off bolt body, exterior, with cleaning patch soaked with solvent.
15. Drip solvent onto bolt face and clean aggressively with cleaning brush.
16. Blow off bolt body with air, if available.
17. Lightly lubricate firing pin assembly, concentrate on mainspring and threads.
18. Re-install firing pin assembly into bolt body.
19. Lubricate bolt body with oil.
20. Apply grease to the back of both bolt lugs (On Bolt Body).

21. Apply grease to cam surface on bolt handle body.
22. Repeat steps 4-6 until patches come out clean, use dry patches intermittently to absorb dirty solvent.
23. Once the bore is clean and dry remove the bore guide.
24. Repeat steps 4-6, insert patch into chamber area, not the bore.
25. Rotate numerous times coating the walls of the chamber with solvent.
26. Repeat same procedure with dry patches.
27. Repeat step 4.
28. Using a bore conditioner, such as Montana Extreme Bore Conditioner, coat the bore with several passes. If bore conditioner is not available use a very light oil.
29. Make several passes through the bore with dry patches ensuring the bore is dry.
30. Remove bore guide and rotate clean dry patches inside the chamber.
31. If possible visually inspect chamber and bore to ensure there are no patch strings or fibers stuck inside.

Recommended Solvents, Grease and Oils

Bore

- Montana Extreme Bore Solvent
- Shooters Choice Bore Solvent
- Hoppes Benchrest #9 Bore Solvent

Bolt Body

- Montana Extreme Gun Grease – Bolt Lugs (Rear), Camming Surface on Bolt
- Tetra Gun Grease
- Shooters Choice Red Grease
- Shooters Choice FP10 Oil – Bolt Body, Firing Pin Spring, Screw Threads

SCOPE CHARACTERISTICS

Positioning the Rifle Scope

Set the Nightforce riflescope to the highest magnification. Place the riflescope in the lower portion of the rings as far forward as possible. Install the top ring halves evenly front and rear. Tighten ring screws with just enough tension to still allow the slight movement of the riflescope. Hold the rifle in your normal shooting position and slowly move the riflescope back until the full field of view is obtained. It is recommended to mount the riflescope at this position or slightly forward to ensure maximum eye relief.

Leveling the Reticle (Field Version)

1. Remove the Butler Creek Eye Piece Cap.
2. Reduce the power to 3.5X.
3. Loosen the scope ring cap screws evenly, just enough to allow the scope to cant left or right.
4. Holding the rifle forward, use the rear of the scope mount base as a guide.
5. Adjust the scope left or right allowing the reticle to be parallel with the flat on the scope mount base.
6. Evenly tighten the screws slowly to eliminate rotating the scope in the rings.

Focusing the Eye Piece

1. This procedure focuses the reticle to your eye. (This has no effect on the image unless severely out of adjustment).
2. Check that the riflescope is set at the highest magnification.
3. Set the parallax adjustment to the infinity setting on the riflescope.
4. Look through the riflescope eyepiece to determine if the reticle is clear and in focus instantly. Note: All Nightforce riflescopes are factory set for average individual eye strength, thus adjustment may not be necessary. Looking at the reticle for an extended period of time during this process will cause your eye to compensate, resulting in false indication of reticle focus.
5. If adjustment is necessary grasp the eyepiece and rotate counter clockwise – loosening it away from the lock-ring while holding the riflescope from turning in the rings. Several turns of the eyepiece are necessary to achieve any measurable affect. Once reticle focus is achieved, lock the eyepiece by threading the lock-ring back to the eyepiece.

Integrated reticle illumination/parallax adjustment system

Parallax Adjustment

All Nightforce riflescopes feature an adjustment for eliminating parallax. Parallax is the apparent movement of the reticle in relation to the target as the shooter moves his eye across the exit pupil of the riflescope. A nod of the head up and down will quickly determine if parallax is present. If parallax has been eliminated the reticle will remain stationary in relation to the target regardless of head placement. Thus not influencing the accuracy of the shot.

Side focus adjustment located on the riflescope saddle opposite from the windage adjustment turret.

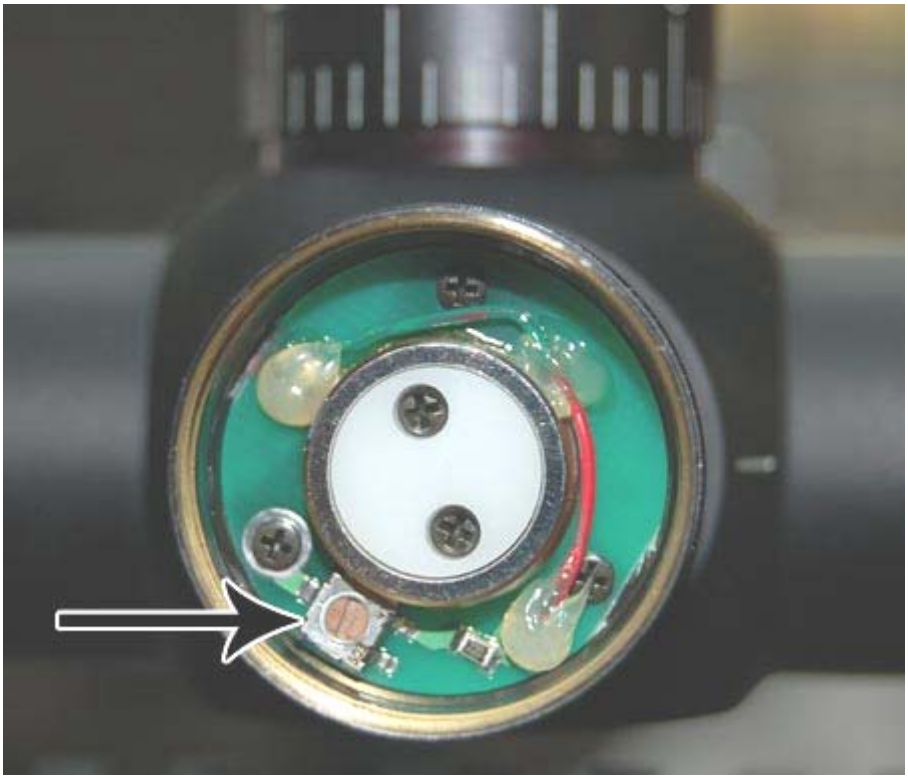
Battery Installation

1. To install the battery unscrew the battery compartment cap counter clockwise while holding the parallax adjustment to prevent it from rotating.
2. Place a new battery (CR2032 Panasonic or equivalent) positive (+) side up or facing you.
3. Replace and tighten the cap.

Battery Duration: Depending on the intensity and conditions, your battery can last up to 720+ hours of continuous use.

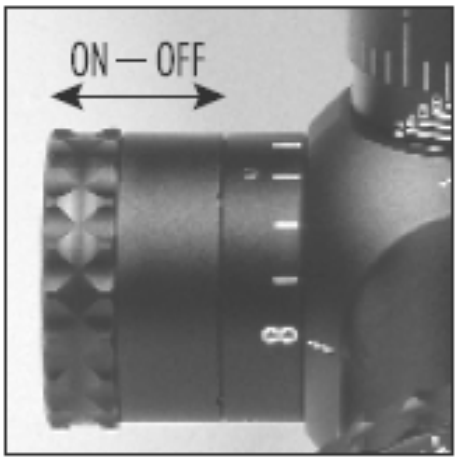
Adjusting the Variable Illumination Reticle Intensity

When the Nightforce NXS reticle illumination system is activated it will illuminate at one predetermined setting. You have the ability to change the reticle illumination intensity by turning a small rheostat located inside the battery compartment. Using a small jeweler's screwdriver, turn the rheostat counter clockwise to increase the illumination intensity or turn the rheostat clockwise to decrease the illumination intensity.



Illumination System Operation

To activate reticle illumination pull outward on the parallax turret assembly.
To deactivate the reticle illumination push inward on the parallax turret assembly.



Care and Cleaning (Optics)

Use a lens brush to remove loose particles of dust and a high-grade glass cleaner applied on a cotton swab. Begin moving in a circular motion from center to the outer edge of the lens. Do not apply excessive pressure.

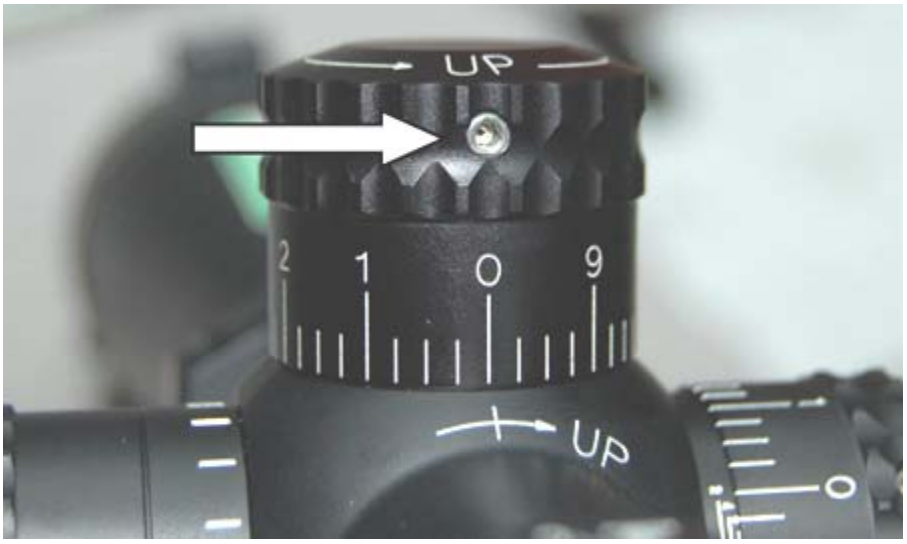
Zero Stop Feature – Adjustment (IBA Version)

The Zero Stop feature on the Nightforce scope allows you to find your elevation zero quickly and accurately in less than ideal situations, especially if the zero is lost. Once set properly you will be able to turn the elevation turret downward until the internal clutch stops the adjustments, at which point you will be back to your pre-set zero. You will be able to set the stop at any zero/range you prefer.

Upon receiving your XM-3 rifle the zero stop may or may not be set. Assuming the feature is not set follow the below instructions.

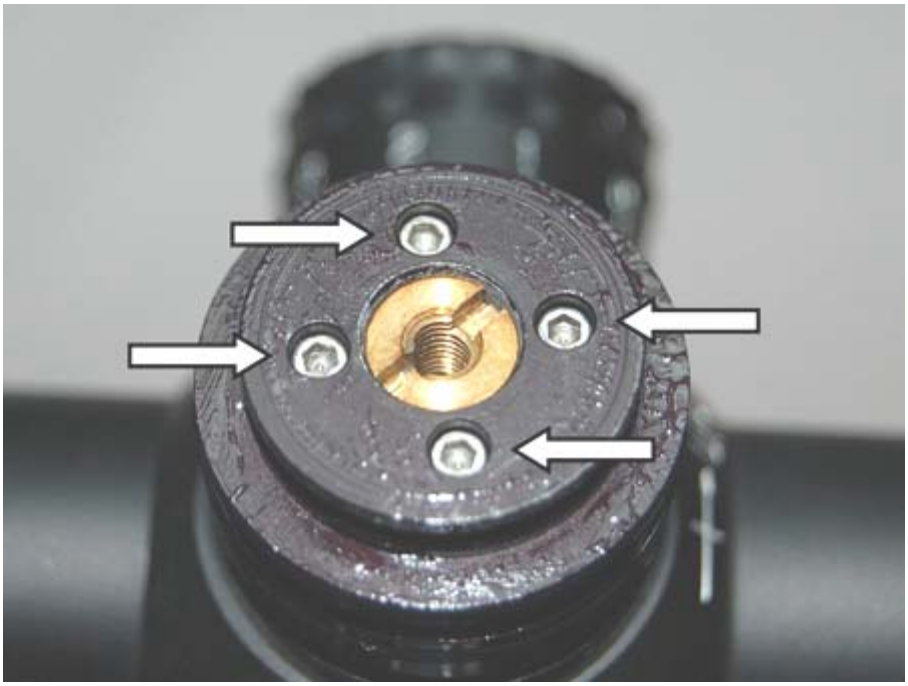
1. Zero at preferred range using ¼ MOA adjustments as normal.
2. Once satisfied with the zero determine how many ¼ MOA clicks you would like to have “Below” the current zero. For example, if the rifle is zeroed at 100 yards you may want an additional 4 clicks (1 MOA) of depression below the existing zero. This will allow you to adjust below your normal zero if necessary. If the rifle is zeroed at 300 yards you may want more depression capability. Determine what you need for field use.

3. Back out the two set screws on the elevation turret cap, one on each side.

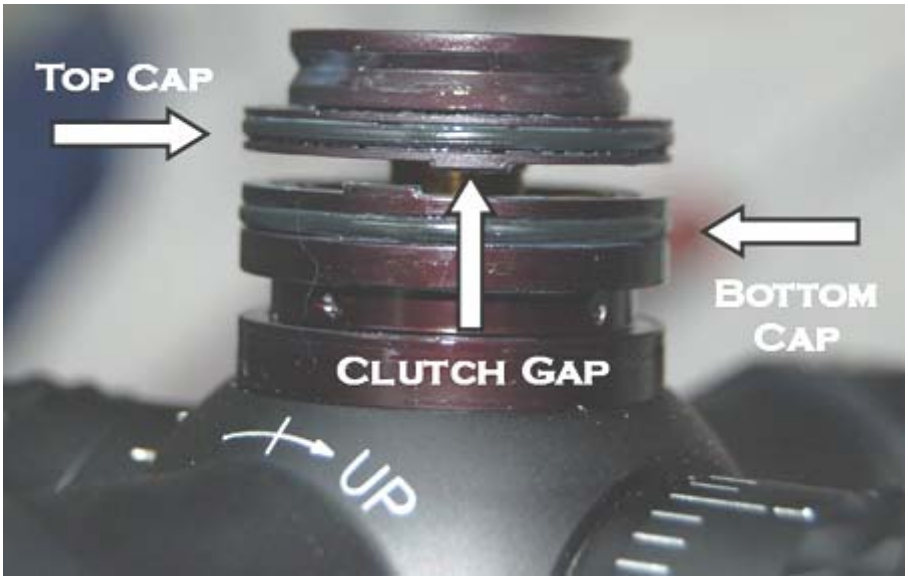


4. Rotate the cap clockwise, you should not feel any clicks.
5. Lift cap upward while rotating clockwise (Never rotate turret cap counter clockwise while set screws are loosened).

6. Loosen screws on clutch assembly 2 turns (DO NOT REMOVE).

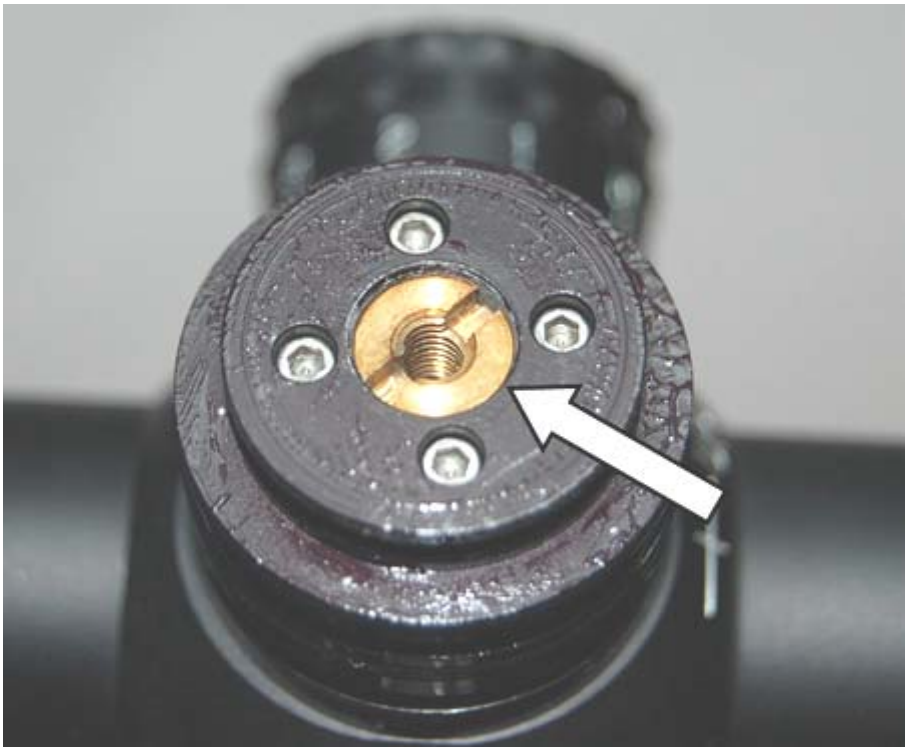


7. Rotate top cap clockwise until it stops (No clicks should be felt).



8. Upon completion there should be no clutch gap.

9. Using a flat head screw driver turn brass screw clockwise (Downward) the number of clicks desired below your current zero, in this case 4 clicks for 1 MOA.



10. Tighten four screws evenly and very gently, DO NOT TORQUE.

11. Re-install the turret cap by pushing downward and rotating clockwise (Never Counter-Clockwise) until set to the number “9”, since that is 1 MOA below the “Zero”. The number of clicks adjusted down in step “9” must match the number below “0” you set the turret cap on. If you adjusted the brass screw 12 clicks (3 Minutes) set the turret cap on 7 and so on.

Problem: There is not enough depression to zero the rifle, the turret will not move downward far enough.

Solution: Remove the turret cap, loosen the four screws and rotate the top cap counter clockwise creating more clutch gap, continue by gently tightening the four screws and replacing the turret cap (or) remove the turret cap and zero the rifle by adjusting the elevation with a flat head screw driver in the brass screw. Do not loosen the four screws for this method.

Problem: The elevation turret rotates too stiff, or easy, stiff, easy, stiff.

Solution: Remove the turret cap and release the tension on the 4 screws. Tighten screws evenly and very gently, DO NOT TORQUE.

Average Come Ups

The below data was established with a 100 yard zero as the baseline. These come ups are an average, not a guarantee. Data Book reference is required for exact shot placement.

High Altitude

ELEVATION 8692 FEET **TEMP 32F**
175 GRAIN Lake City AA11 **Bore Height 2.5 inches**

Yards	Mils	MOA
200-	0.60	2.0
250-	**1.03**	**3.5**
300-	1.49	5.1
450-	**3.07**	**6.8**
500-	3.66	8.7
550-	**4.29**	**10.6**
600-	4.96	12.6
650-	**5.56**	**14.8**
700-	6.37	17.0
750-	**7.12**	**19.4**
800-	7.88	21.9
850-	**8.70**	**24.5**
900-	9.56	32.9
950-	**10.48**	**36.0**
1000	11.4	39.3

Normal Altitude

ELEVATION 450 FEET **TEMP 70F**
175 GRAIN Lake City AA11 **Bore Height 2.5 inches**

Yards	Mils	MOA
200-	**0.60**	**2.1**
250-	1.07	3.7
300-	**1.55**	**5.3**
350-	2.09	7.2
400-	**2.67**	**9.2**
450-	3.30	11.4
500-	**3.97**	**13.6**
550-	4.66	16.0
600-	**5.39**	**18.5**
650-	6.17	21.2
700-	**7.00**	**24.1**
750-	7.89	27.1
800-	**8.84**	**30.4**
850-	9.82	33.8
900-	**10.88**	**37.4**
950-	12.00	41.3
1000	**13.18**	**45.3**

SOUND SUPPRESSOR
Operation and Characteristics
SPECIFICATIONS FOR FA762SS

FAST-ATTACH™ LIGHT WEIGHT SOUND SUPPRESSOR

FA762SS
OPERATOR'S MANUAL

Record Suppressor Serial Number here _____

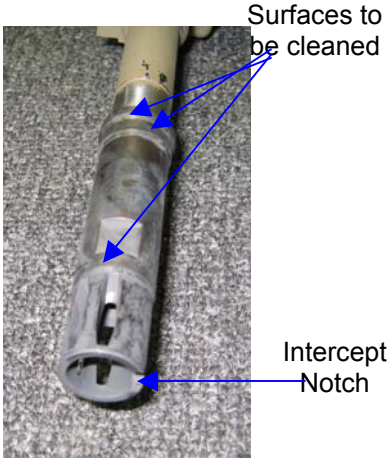
SPECIFICATIONS FOR FA762SS SOUND SUPPRESSOR

Suppressor Material:	**High Temperature Alloys / Stainless Steel**
Weight:	**19 ounces**
Diameter:	**1½ inches**
Length:	**9.8 inches**
Length in front of muzzle:	**7.2 inches (Varies depending on adaptor)**
Length in front of Compensator:	**5.5 inches (Varies depending on adaptor)**
Compensator/Adapter	**Heat treated stainless steel alloy**
Sound reduction:	**135 DB (A) at shooters ear (20" AR-IO)**
Accuracy:	**Slight increase with Suppressor**
Velocity:	**Up to 50 FPS increase**
Application:	**Designed for use with sniper rifles**

Nomenclature of the SureFire FA762SS Sound Suppressor

Top View
Locking Ring in Closed Position
Showing Ratchet Stop

Bottom View
With Locking Ring in
Open Position



SUPPRESSOR INSTALLATION

WARNING: Confirm that weapon is unloaded and on Safe (Refer to your weapon's Operator Manual for weapon safety features and handling instructions.) With muzzle pointed in a safe direction remove the magazine, lock the bolt to the rear and inspect chamber and receiver verifying the weapon is clear.

1. **OPEN Locking Ring**
   - Hold the Suppressor body in your left hand with the front facing away.
   - Depress the Ratchet Stop Tab with thumb.
   - Using the right hand, rotate the Locking Ring (Counter Clockwise) until it stops.

2. **Attach**
   - Orient Suppressor with serial number stamp on top and slide over the Compensator/Adapter.
   - Rotate Suppressor until the Suppressor drops into the intercept notch stopping rotation.
   - Pull Suppressor firmly onto the weapon until fully seated on the Compensator/Adapter.
   - Note: If the mating surfaces are carbon fouled, slap the front of the Suppressor with your palm to make sure the Suppressor is fully seated.

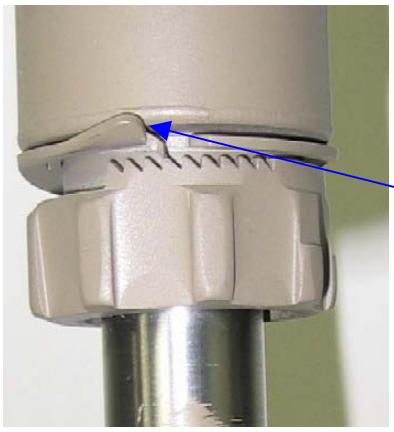
3. **Rotate and Lock**
   - Rotate Locking Ring clockwise and **TIGHTEN FIRMLY** by hand (approx. ½ turn) until it can be rotated no further.

Note:

Tightness of the Locking Ring is critical to accuracy and minimal point of impact shift.

4. **Confirm Tightness!**
   - **Fully tighten the Locking Ring as tight as possible!**
   - **Never back it off to the last notch!**

   Note: The Locking Ring notches are a failsafe to keep the Suppressor attached if something rubs against the Locking Ring. If the tooth on the Ratchet Stop does not drop into a notch when the Locking Ring is fully tightened, that is OK. Just remember to tighten the Locking Ring as tight as possible by hand. The ratchet can be lightly pushed.



5. **Verify**
   - Attempt to rotate Suppressor, only very slight movement under tension should be felt.
   - Attempt to remove Suppressor by aggressively pulling Suppressor forward. When attached correctly, the Suppressor will have no movement.

6. **Installation is now complete**

SUPPRESSOR REMOVAL

NOTE: After firing, Sound Suppressors are most easily removed from the weapon while they are still warm. Carbon fouling solidifies as the unit cools, making later removal more difficult.

WARNING: Do not remove / install Suppressor on a loaded weapon.

WARNING: Confirm that weapon is unloaded and on Safe (Refer to your weapon's operator's manual for weapon safety features and handling instructions). With muzzle pointed in a safe direction remove ammunition from receiver. Draw bolt/carrier assembly to rear and inspect chamber and receiver verifying weapon is clear.

1. **Secure weapon, keeping muzzle pointed in a safe direction.**

2. **Open Locking-Ring**

   Hold Suppressor body with your left hand pulling Suppressor lightly into the weapon. Grasp the Locking Ring firmly and press your knuckle against the Ratchet Stop, disengaging it. Then break the Locking Ring loose by quickly rotating it counter-clockwise. Now relax your grip and continue rotating the ring until it stops.

3. **Firmly pull Suppressor forward, twisting left and right, to remove it from the Compensator/Adapter.**

MAINTENANCE

CLEANING

NOTE: The Suppressor is a precision instrument having a tight fit between the bearing surfaces. The Compensator/Adapter should be cleaned to remove carbon and copper fouling deposits from bearing surfaces.

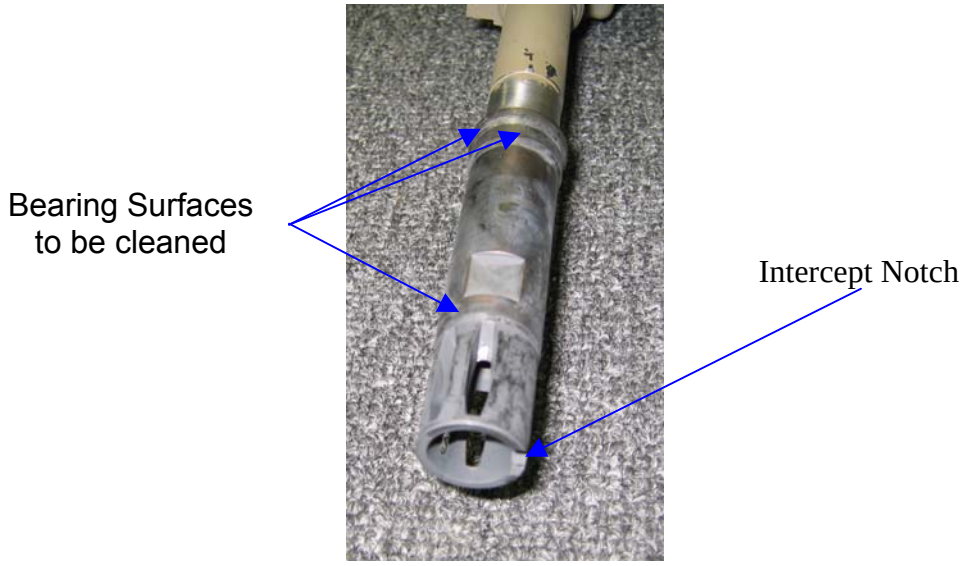
The FA762SS Sound Suppressor and Flash Hider/Adapter mating surfaces should be cleaned after firing using the following procedure:

1. Brush and/or scrape carbon & copper residue from Suppressor mounting surfaces and Compensator/Adapter. Take care to orient the parts so carbon does not fall into the weapon bore, or into the Suppressor body.

2. Copper remover/gun cleaning solvent may be used to remove fouling from the Compensator/Adapter.

NOTE: Do not allow solvent(s) to flow into the Suppressor body.

COMPENSATOR / ADAPTER
FA762SS



COMPENSATOR/ADAPTER CLEANING

THE SUPPRESSOR YOU ARE USING IS A PRECISION UNIT; IT FITS WITH MINIMUM CLEARANCE AT THE BEARING SURFACES. REATTACHMENT WILL BE DIFFICULT IF THESE SURFACES ARE CARBON FOULED. SCRAPE AND BRUSH THESE SURFACES AND THE MATING AREAS IN THE SUPPRESSOR AND YOU WON'T HAVE ANY ATTACHMENT PROBLEMS.

OPERATOR USE NOTES

1. ZEROING: Confirm zero both with and without Suppressor attached. SureFire Suppressors have minimal impact shift but this can very from weapon to weapon.

2. As a rule all Suppressors have flash on the first round fired because of air inside the Suppressor mixing with the combustion gases. After the first round most of the flash is eliminated due to the Suppressor being filled with inert gases.

3. “WET” FLASH SUPPRESSION: To minimize first round flash, detach Suppressor and pour water into the rear of detached Suppressor. Rotate, spreading the water inside the Suppressor. Hold the Suppressor muzzle down draining all water out the front. There will be the correct amount of water left inside the suppressor when water stops draining.

4. If water is unavailable, saliva can be spit into the front of the Suppressor.

WARNING: Under no circumstances should the Suppressor be filled with grease, oil, or any other material before use. Placing a foreign substance in the unit could alter the path of the projectile and/or cause the weapon to malfunction.

CAUTION: As with all weapons, eye protection is recommended when firing you rifle with or without the Suppressor attached.

Mirage Wraps

It is important to adjust the wrap correctly. There is a front and back. There is an internal ridge built into the cover that prevents the wrap from sliding forward under recoil. You can feel the thickness on one end of the wrap—this is the back end. This internal ridge prevents the wrap from blowing off under the weapon's recoil.

To install the wrap, determine front from back. Grasp the wrap with hands and roll the wrap TIGHTLY around the suppressor.

Make sure the front end of the wrap is flush with the front of the suppressor—NO CLOTH SHOULD OVERHANG.

This wrap process is best accomplished with the suppressor already installed. To remove the suppressor after firing, loosen the back end of the wrap.

Depress suppressor detent, loosen the nut and use the secured part of the wrap to handle the suppressor if it is still hot.

Manufacturer Contact Information

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